

Unit Overview – Air Masses and Fronts

Essential Questions

- What type of weather can you expect from different types of air pressure?
- How do global wind patterns affect the movement of air masses?

- I totally get it
 I kinda get it
 I don't get it

What came first:

- (5th Grade) Explain how global patterns such as the jet stream and water currents influence local weather in measurable terms such as temperature, wind direction and speed, and precipitation.

What comes next:

- (High School: Earth and Environmental Science) Explain the formation of typical air masses and the weather systems that result from air mass interactions.

Enduring understanding

- The four types of air masses have unique characteristics (tropical, continental, maritime, and polar).
- The four types of frontal boundaries have unique characteristics (warm, cold, stationary, and occluded).
- Changes in air pressure causes changes in air density.

Important to know and do

- Track the movement of air masses across the continent for five consecutive days.
- Predict the type of weather changes brought on by changes in air mass, pressure, and frontal boundaries.
- Interpret a weather map that uses symbols for air masses, pressure systems, and frontal boundaries.

Worth being familiar with

- Seasonal changes in the Jet stream affect weather patterns

Vocabulary to master

<input type="checkbox"/> Air mass	<input type="checkbox"/> Front	<input type="checkbox"/> Pressure system	<input type="checkbox"/> Weather pattern
<input type="checkbox"/> Cold front	<input type="checkbox"/> Warm front	<input type="checkbox"/> Occluded front	<input type="checkbox"/> Stationary front
<input type="checkbox"/> High pressure	<input type="checkbox"/> Low pressure	<input type="checkbox"/> Wind	<input type="checkbox"/> Coriolis effect
<input type="checkbox"/> Frontal boundary	<input type="checkbox"/> Density	<input type="checkbox"/> Polar air mass	<input type="checkbox"/> Maritime air mass
<input type="checkbox"/> Continental air mass	<input type="checkbox"/> Tropical air mass	<input type="checkbox"/> Jet stream	<input type="checkbox"/>
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